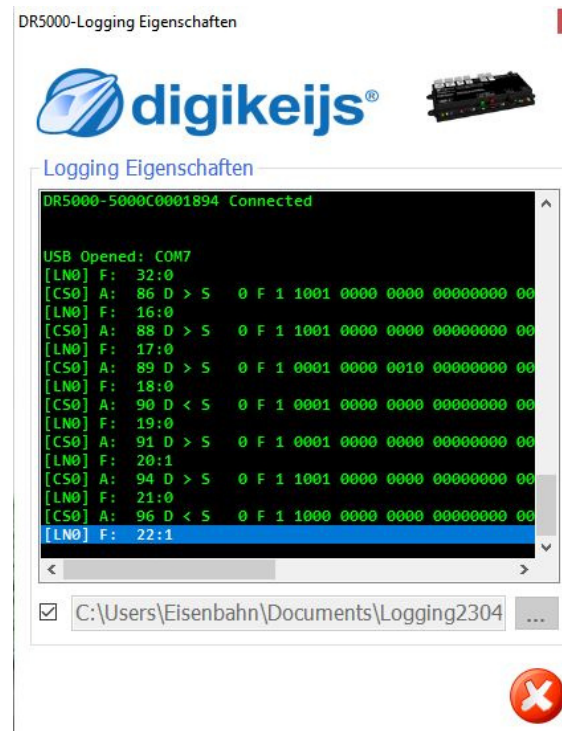# Description of the Logging function

(2019-06-18)

Induction

Since the introduction of the DR5000, there has been a so-called logging window. All commands, functions and much more are displayed in this window. If required, this information can be saved in a TXT file for later analysis.

This description contains important messages for the user that are displayed in the logging window of the DR50xx product line. All messages that are not explained here are system messages of the DR50xx.

Activate log window

Logging Information

Storage location of TXT file

General structure of an entry in the logging window

[CS0]	M: TC 306mA PC 0mA LC 40mA TT 26.4'C CT 26.6'C	CA 2C CB 09
Internal message where the command comes from or where it goes to. What is displayed here is only important for the user in special cases.	Message entry that is interesting for the user. (Explanation see below.)	Internal function of the DR5000

DR5000 status message

M:	TC 324mA	PC 0mA	LC 31mA	TT 27.5'C	CT 26.8'C	CA 2C CB 09
measurement	Power consumption on main track	Current consumption on programming track	Current consumption at Loconet®	Temperature of the H-bridge (main track)	CPU temperature	Internal function of the DR5000

Loco command

A: 15	D >	S 29	F 1 0001 0000 0000 00000000 00000000
Locomotive address (15)	Direction of locomotive travel forward	Number of transmitted speed steps (here 29)	Display which functions are active
A: 69	D <	S 101	F 1 0001 0000 0000 00000000 00000000
Locomotive address (69)	Direction of travel of the locomotive backwards	Number of transmitted speed steps (here 101)	Display which functions are active

Railcom® Messages
Please note that the DR5000 is technically correct. This means that a one must be added to the displayed feedback unit. RM 109 then physically corresponds to RM 110 etc.

F:	109:1	0074	>
Feedback	110 occupied	Locomotive address 74 detected	Forward track direction (not supported by all decoders.)
F:	108:1	0072	<
Feedback	109 occupied	Locomotive address 72 detected	Rerail direction backwards (not supported by all decoders.)
I:	Q:96	20	
Information	QoS message loco address 96	QoS message in % of locomotive (not supported by all decoders.)	
I:	S: 0074	L 66	
Information	Locomotive address 74 sends the	current speed level = 66 (not supported by all decoders.)	

Normal feedback
Please note that the DR5000 is technically correct. This means that a one must be added to the displayed feedback unit. RM 72 then corresponds to RM 73, etc.

F:	72:0		
Feedback	73 free		
F:	72:1		
Feedback	73 occupied		

Magnetic article switching circuit
Two commands always belong to a magnetic article circuit. With the first command, the output is switched on and remains active for the minimum or maximum time set in the control panel. The output is then switched off again with the second command.

Please note that the DR5000 is technically correct. This means that a one must be added to the magnetic article displayed in the log. Switched magnetic article address 9 then corresponds physically to the actual address 10 etc.

T:	9	|*	
Magnetic article output	number 10	Position just switched (output =1)	
T:	9	||	
Magnetic article output	number 10	Position just switched off (output =0)	
T:	15	/*	
Magnetic article output	number 16	Position bent switched (output =1)	
T:	15	//	
Magnetic article output	number 16	Bent position switched off (output =0)	

Reading a CV via the programming track

L:CV read	:SVC:0	CV 29	
CV read	via the programming track	of the CV 29 requested	
M: PC	94mA		
Query Prog. Track current	measured value		
X:SVC:0	CV 29=34	ST OK	
On the programming track	Value of CV 29 = 34 detected	Status of the read operation OK.	

Writing a CV via the programming track

L:CV write :	SVC:0	CV 29=34	
Write CV requested	on the programming track	CV 29 with the value 34	
M: PC	94mA		
Query Prog. Track current	measured value		
X:SVC:0	CV 29=34	ST OK	
Answer Programming track	Value of CV 29 = 34 detected	Status of the write operation OK.	

Reading a CV with Railcom® via the main track POM
Additional hardware (DR5088RC) is required to read a CV via the main track and Railcom®.

L:CV read :	POM:65	CV 27	
Read CV	via the main track of locomotive address 65	request the CV 27	
X:POM	:65	CV 29=11	ST OK
Answer Main track	Lokadresse 65	Value of CV 29 = 11 detected	Status of the read operation OK.

Writing a CV about the main track POM

L:CV write :	POM:65	CV 29=11	
Write CV requested	via the main track to the locomotive address 65	CV 29 with the value 11	